

WHAT IS CLAIMED IS:

1 1. A method comprising:

2 positioning a substrate and a light source assembly adjacent to each other,

3 wherein the light source assembly is configured to generate light for

4 reading or writing data to an optical data storage media, wherein the

5 light source assembly comprises a first and second alignment marks,

6 wherein the substrate comprises first and second alignment marks;

7 adjusting a position of the light source assembly with respect to the substrate

8 until a line extending between the first and second alignment marks of

9 the light source assembly is substantially parallel to a line extending

10 between the first and second alignment marks of the substrate;

11 creating a rigid connection between the light source assembly and the

12 substrate.

1 2. The method of claim 1 further comprising providing a first adhesive

2 between the substrate and the light source assembly, wherein creating the rigid

3 connection comprises activating the first adhesive to create a fixed bond between the

4 substrate and the light source assembly.

1 3. The method of claim 2 wherein the first adhesive is applied to a surface of

2 the substrate.

1 4. The method of claim 2 wherein the first adhesive is a heat activated

2 adhesive, and wherein activating the first adhesive comprises subjecting the first

3 adhesive to heat generated by a heat source.

1 5. The method of claim 1 wherein the light source assembly comprises a light

2 source configured to emit a light beam for reading or writing data to the optical data

3 storage media, wherein the line between the first and second alignment marks of the

4 light source assembly is substantially parallel to a direction at which the light beam is

5 emitted from the light source.

1 6. The method of claim 1 wherein adjusting further comprises concurrently
2 viewing one of the first and second alignment marks of the light source assembly with
3 one of the first and second alignment marks of the substrate through a microscope.

1 7. The method of claim 1 wherein adjusting further comprises concurrently
2 viewing one of the first and second alignment marks of the light source assembly with
3 a centerline of the substrate through a microscope, wherein the centerline extends
4 between the first and second alignment marks of the substrate.

1 8. The method of claim 2 wherein the substrate comprises a bond pad, wherein
2 the first adhesive is applied to the first bond pad.

1 9. The method of claim 2 further comprising:
2 providing a second adhesive between the substrate and an integrated circuit;
3 adjusting a position of the integrated circuit with respect to the substrate;
4 activating the second adhesive to create a fixed bond between the integrated
5 circuit and the substrate.

1 10. The method of claim 9 wherein the second adhesive is applied after the
2 first adhesive is activated.

1 11. The method of claim 9 wherein the position of the integrated circuit is
2 adjusted with respect to the substrate before the second adhesive is activated.

1 12. A method comprising:
2 providing a first adhesive between a substrate and a light source, wherein the
3 light source is configured to generate light for reading or writing data
4 to an optical data storage media, wherein the substrate comprises first
5 and second alignment marks, wherein the light source comprises first
6 and second alignment marks;
7 adjusting a position of the light source with respect to the substrate until a line
8 extending between the first and second alignment marks of the light

9 source is substantially parallel to a line extending between the first and
10 second alignment marks of the substrate;
11 activating the first adhesive to create a fixed bond between the substrate and
12 the light source.

1 13. The method of claim 12 wherein the position of the light source is adjusted
2 with respect to the substrate before the first adhesive is activated.

1 14. The method of claim 12 wherein the first adhesive is applied to the
2 substrate.

1 15. The method of claim 12 wherein the first adhesive is a heat activated
2 adhesive, and wherein activating the first adhesive comprises subjecting the first
3 adhesive to heat generated by a heat source.

1 16. The method of claim 12 wherein the light source is configured to emit a
2 light beam, wherein the line between the first and second alignment marks of the light
3 source is substantially parallel to a direction at which the light beam is emitted from
4 the light source.

5 17. The method of claim 12 wherein adjusting comprises concurrently viewing
6 one of the first and second alignment marks of the light source with one of the first
7 and second alignment marks of the substrate through a microscope.

8 18. The method of claim 12 wherein adjusting comprises concurrently viewing
9 one of the first and second alignment marks of the light source with a centerline of the
10 substrate through a microscope, wherein the centerline extends between the first and
11 second alignment marks of the substrate.

1 19. The method of claim 12 further comprising:
2 providing a second adhesive between the substrate and an integrated circuit;
3 adjusting a position of the integrated circuit with respect to the substrate;

4 activating the second adhesive to create a fixed bond between the integrated
5 circuit and the substrate.

1 20. The method of claim 19 wherein the second adhesive is applied after the
2 first adhesive is activated.